Applicant: Yingyos Avihigsanon, et al. Attorney's Docket No.: 01948-059001

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

- 1. (Currently amended) A method for evaluating acute transplant rejection monitoring the status of a transplanted organ in a host, the method comprising:
 - a) obtaining from the host a post-transplantation sample;
- b) determining [[a]] the magnitude of gene expression in the <u>post-transplantation</u> sample of at least one gene of a cytoprotective gene cluster, wherein the at least one gene is heme oxygenase 1 (HO1), A20, or a gene that is coordinately regulated with HO1 or A20 in a transplant rejection sample; and
- c) comparing the magnitude of gene expression of the at least one gene in the posttransplantation sample to a baseline magnitude of gene expression of [[said]] the at least one
 gene or to a baseline magnitude of gene expression of a constitutively expressed gene; and
 d) detecting thereby upregulation of the at least one gene, wherein upregulation of the at
 least one gene indicates that the host is likely to experience [[acute]] transplant rejection.
- 2. (Currently amended) The method of claim 1, wherein the <u>post-transplantation</u> sample is a graft biopsy.
- 3. (Currently amended) The method of claim 1, wherein the <u>post-transplantation</u> sample is a fluid test sample.
- 4. (Original) The method of claim 3, wherein the fluid test sample is selected from the group consisting of: urine, peripheral blood, bile, bronchoalveolar lavage fluid, pericardial fluid, gastrointestinal juice, feces, and fluid gathered from an anatomic area in proximity to an allograft.

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5. (Currently amended) The method of claim 1, wherein the upregulation of the at least one gene of the cytoprotective gene cluster indicates early acute transplant rejection determining the magnitude of gene expression comprises determining the magnitude of expression of HO1 and A20.

6-7. (Canceled).

- 8. (Currently amended) The method of claim [[6]] $\underline{1}$, wherein the transplant rejection is an acute rejection.
- 9. (Original) The method of claim 8, wherein the acute rejection is an early acute rejection.

10-34. (Canceled)

- 35. (New) The method of claim 1, wherein the transplant rejection is chronic transplant rejection.
- 36. (New) The method of claim 35, wherein the at least one gene is A20 or a gene that is coordinately regulated with A20, wherein upregulation of A20 or a gene that is coordinately regulated with A20 indicates that the host is likely to experience chronic transplant rejection.
- 37. (New) The method of claim 36, further comprising determining the magnitude of gene expression of HO1 or a gene that is coordinately regulated with HO1, wherein a low expression level of HO1 indicates that the host is likely to experience chronic transplant rejection.
 - 38. (New) The method of claim 1, wherein the host is a human patient.

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39. (New) The method of claim 1, wherein the transplanted organ is a kidney.

- 40. (New) The method of claim 1, wherein the sample is obtained during the non-rejection period.
- 41. (New) The method of claim 1, wherein the constitutively expressed gene is glyceraldehyde-3-phosphate dehydrogenase.
- 42. (New) The method of claim 1, wherein the constitutively expressed gene is cyclophilin B or actin.